Patient Care Review

By: 2LT Briscoe

21 December 2000

Preceptor: 2LT Crail

Patient

- 24 yo AAF
- Admitted: 11 December 2000
- Chief Complaint: severe neck and back pain; chest pain, hypoxia, dyspnea
- Dx: R/O PE

Patient cont.

- Ht: 5’5”
- Wt: 142# (64.5 kg)
- Large Frame
- UBW: 170-180# (79-83%)
- DBW: 140-159# (MHWT, 89-101%)

Overview

- Pt admitting Dx:
  - R/O PE however SLE contributes significantly to the episodes pt is experiencing
  - HTN has also been an issue for pt during hospital stay with direct implications on her tx

Definitions

- Pleural Effusion (PE)
  - Abnormal accumulation of fluid in intrapleural spaces of the lungs
- Systemic Lupus Erythmatosus (SLE)
  - Chronic inflammatory disease affecting many systems
- Hypertension (HTN)
  - Sustained increase in arterial diastolic or systolic pressure

Etiology

- SLE: Although undetermined, it has been suggested that it is caused by a viral infection or a dysfunction of the immune system.
- HTN: adrenal disorders, Cushing's syndrome, pheochromocytoma, thyrotoxicosis, preeclampsia, and chronic glomerulonephritis

Risk Factors

- SLE
  - Predominantly in young women (90%), but also in children
  - Sera of most pts contain antinuclear antibodies, including anti-DNA antibodies
- HTN
  - Unknown
  - Higher incidence in men and African Americans
  - Heredity
    - Environmental factors (dietary Na, obesity, and stress) seem to act only in genetically susceptible individuals

Symptoms PE

- Fever
- Chest pain
- Dyspnea
- Nonproductive cough

Symptoms SLE

- Arthritis
- “Butterfly rash”
- Weakness
- Fatigue
- Weight loss
- Photosensitivity
- Fever
- Skin lesions
- Alopecia
- Antiphospholipid syndrome
- Glomerulonephritis
- Recurrent pleurisy (w/ or w/o effusion)
- Pulmonary HTN
- Pericarditis
- Peritonitis
- Neuritis
- Anemia

Symptoms HTN

- Suboccipital headaches
- Tinnitus
- Lightheadedness
- Ready fatigability
- Palpitations
- Severe headaches
- Blurred vision
- Congestive heart failure or cerebrovascular accident

Treatment PE

- Aspirate or surgically drain exudate
- Treat specific cause of exudate
- Corticosteroids
- Diuretics
- Vasodilators
- O2 therapy
- Intermittent positive pressure breathing

Treatment SLE

- Corticosteroids
- Topical steroids
- Salicylates
- Protect body surfaces from direct sunlight

Treatment HTN

- Diuretics
- Vasodilators
- SNS depressants
- SNS inhibitors
- Angiotensin converting enzyme inhibitors
- Calcium channel blockers
- Ganglionic blocking agents
- Low sodium, low saturated-fat diet
- Exercise
- Avoid stress
- Get adequate rest

Prognosis

- SLE
  - Greatly improved over past two decades
  - Long-term prognosis is good
  - 10 yr survival >95%
- HTN
  - Untreated pt is at great risk for developing disabling or fatal complications
  - Effective medical control will prevent or delay complications and prolong life

Nutritional Implications

- SLE
  - Weight gain
  - GI disturbances from medications
  - Osteoporosis
  - Steroid-induced diabetes
  - Kidney disease
  - Cardiovascular disease
- HTN
  - Follow a low sodium, low saturated-fat diet
  - control obesity

Current Medical Treatment

- Pain control
- O2 therapy
- Monitor for infection
- Various tests
- Readjustment of medications

Medical/Surgical History

- SLE (1990)
- Pulmonary HTN (2000)
- Cardiomyopathy
- Proteinuria
- HTN
- B/L Breast Reduction (Apr 2000)

Social/Family History

- Works for lab with malaria genome (has not worked in approximately one month)
- No ETOH or Tobacco use
- Parents have been at hospital with pt
  - Very involved and supportive

Diet PTA

- Good PO intake
- Likes to cook
- Does not follow a special diet

Diet Since Admission

- Diet Order: Cardiac prudent
- PO intake:
  - Poor upon admission due to pain
  - Excellent over weekend (Sat, Sun, Mon)
  - Decreased again (Tues, Wed)

Nutritionally Significant Medications

- Warfarin
- Prednisone
- INH (anti-TB)
- Vit B6
- Vit B12
- Oscal 500
- Iron
- Folate

Nutritionally Significant Labs

	Na	K	Glu	BUN	Creat	Alb	Hgb	Hct
12/11	135	3.9	71	20	1.0	2.6	11.5	36.0
12/16	135	5.2	125	16	1.1		11.3	35.4
12/20	139	4.4	105	18	0.9	2.6 (12/19)	12.1	37.3

Nutritional Diagnostic Statement

- Although patient is 89-101% DBW, she is at mild nutritional risk due to poor PO intake and 79-83% UBW.
- Important to note that patient is on steroids which can increase weight, affecting her DBW.

Estimated Needs

- Kcal: 2200-2500 (25-30 kcal/kg + 250)
- Protein: 52-65 g (0.8-1.0 g/day)

Goal of Therapy

- Maintain nutritional status and promote overall health by encouraging good PO intake
- Keep blood pressure within acceptable range through low-sodium diet

MNT Plan

- Provide patient's father with coumadin handouts
- Work to accommodate patient's food preferences
- Work with nursing and family to begin calorie count
- Provide pt with low sodium and DASH diet information

Potential Health Outcomes

- Maintain/improve good nutritional status and overall health leading to recovery and improved quality of life
- Reduce hospital stay and re-admissions

Potential Resources Saved

- Economic cost to patient, family, and hospital through decreased hospital stay
- Emotional cost to family
- Physical cost (fatigue) to patient

QUESTIONS